

*Copy*

8 monofilament hooks for engaging and lifting the grounded tennis ball upon the tangential contact,  
9 with said hooks being characterized as having an average monofilament diameter greater than 8.0  
mil and an average hook height of at least 1.70 mm.

- 1 10. (First amended) A method for retrieving a grounded tennis ball with a tennis  
2 racquet equipped with a ball retrieving attachment attached along an outer peripheral edge of a  
3 shoulder of the tennis racquet with the hooked material positioned thereupon at a retrieving  
4 position for engaging and lifting a grounded tennis ball upon tangential contact therewith, said  
5 method comprising:  
6 a) providing a strip of a hooked material having a pressure sensitive adhesive  
7 applied to a resilient backing member equipped with a plurality of pre-shrunk nylon  
8 monofilament hooks of an average monofilament diameter of at least 8.0 mil, an average hook  
9 height of at least 1.85 mm, an average hook width of at least 1.0 mm, and an average depth of at  
10 least 0.6 mm, with the hooks being of a spiral configuration arranged in repetitive rows of at least  
11 250 hooks per square inch;  
12 b) applying the pressure sensitive strip to the outer peripheral edge of the  
13 shoulder of the tennis racquet at the retrieving position so as to permit the nylon monofilament  
14 hooks of the hooked material to make the tangential contact with the grounded tennis ball;  
15 c) tangentially contacting the grounded tennis ball with the nylon  
16 monofilament hooks of said hooked material so as to engage and hook a tennis ball nap of the  
17 grounded tennis ball onto said nylon monofilament hooks;  
18 d) lifting the hooked tennis ball engaged by the nylon monofilament hooks  
19 with the tennis racquet; and  
20 e) retrieving the lifted tennis ball from the strip.

#### REMARKS

##### Invention Disclosure Statement

In Paragraph 1 of page 2, the Office Action of Paper No. 3 regarding certain references submitted with Information Disclosure Statement as failing to comply with the requirements of

37CFR1.98(a)(2), enclosed herewith are complete copies of those patents which were listed in the original Invention Disclosure Statement, but uninitialed by the Examiner in the Paper No. 3 transmittal and submitted herewith the fee payment for late submission thereof. The patents in the original Invention Disclosure Statement for which only the first page had been originally submitted were obtained as a result of a cursory search of the United States Patent Office data base site. Since the retrieval of complete patent copies from the data base is tedious and time consuming, only portions of certain patents were initially printed. The first page printout often revealed that certain patents were not germane to the patentability issues herein. If any preliminary patent printout from the data base was regarded to be irrelevant or not germane to the patentability issues, then the complete patent was not obtained from the data base. Consequently, to avoid undue expenses to the client, complete patent copies were not obtained if the patent printout did not reveal any particular relevancy. Since there exists a risk in not listing all references reviewed (relevant or irrelevant), applicant's Invention Disclosure Statement included a listing of all patents reviewed (including those in part), and including those which were deemed not applicable or redundant. The patents which were initialed in the copy of the Invention Disclosure Statement forwarded with Paper No. 3 and applied in the 35 U.S.C. 103(a) rejection were deemed to be those patents warranting consideration, while those not uninitialed were deemed not to be relevant to the claimed invention. Those patents mentioned on pages 1-3 of applicant's application including the cited *Feldt*, *Musslin*, and *Urwin* patents appear to be relevant to applicant's claims and the claimed invention, as a whole.

#### The Claimed Invention

Applicant's claimed invention involves an unexpected discovery (amongst a host of potential fasteners combinations manufactured under a wide array of manufacturing conditions to produce a host of different types of fastener combinations) that a most uncommon fastener hook material has a uniquely distinctive ability to tangentially hook onto the nap of a conventional tennis ball and lift the ball. As pointed out in applicant's background of the invention, the prior art had conceded that hooked fasteners were incapable of tangentially hooking onto the nap of

conventional tennis balls. As a result, the prior art taught to completely cup the tennis ball, or as the cited *Feldt* patent teaches, to completely replace the tennis ball cover with the loop material so that the hooked material will then engagingly hook and lift the tennis ball. Applicant's unique and unexpected discovery overcomes a recognized problem of forty years or more. There exists no teachings that an uncommon hooked material of uncommon hook characteristics would engage, much less lift; and even more unexpectedly (i.e. the invention as a whole) to work with repetitive consistency when, in fact, the prior art recognized its own failure. Nothing in the prior art or record remotely teaches or suggests these unobvious embodiments of applicant's claimed invention.

Applicant has taught throughout her specification that only a "highly specialized hook type of fabric derived from hook and loop fasteners, ... will tangentially hook and lift all major brands of tennis balls. Amongst the host of available hooked fabric materials, only a very narrowly defined and isolated type of fasteners have sufficient hooking and lifting capabilities to lift a tennis ball upon tangential contact." The characteristics and discovery of applicant's unexpected invention remained untaught and totally unrecognized by the art of record.

Only those hooked fastener materials having the narrowly defined characteristics of applicant's claims, namely pre-shrunk nylon monofilament hooks, characterized as:

- a) "monofilament diameter greater than 8 mil. and an average hook height of at least 1.7mm". (Claims 1 - 9)
- b) "average hook width of at least 1.0 mm". (Claims 2 - 8)
- c) "average hook depth of greater than 0.5 mm". (Claim 2)
- d) or more limitly claimed Average:
  - height of at least 1.85 mm (claims 4-8 and 10-15)
  - diameter of at least 8.25 mil (claims 4-8 and 10-15)
  - hook width of at least 1.0 mm (claims 4-8 and 10-15)
  - depth of at least 0.6 (claims 4-8 and 10-15)
- e) - at least 300 hooks per square inch (claim 9)

- hook height greater than 1.90 mm (claim 12)
- Average hook width about 1.1 mm to about 1.3 mm and average hook depth from 0.69 mm to about 0.75 mm. (claim 10-15)
- at least 250 hooks per square inch (claims 5-8 and 10-15)

35 U.S.C. 103(a) Rejections

In paragraph 3 of Paper No. 3 Claims 1-7, 9, 10 and 12 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 4,834,393 (*Feldt*) or French Patent Number 2,594,037 (*Musslin*) and either in view of U.S. Patent Number 5,077,870 (*Melbye et al.*, hereinafter *Melbye*) and applicant's admission of prior art in the specification.

In paragraph 4 of Paper No. 3, Claims 8, 11 and 13-15 stand rejected under 35 U.S.C. 103(a) as being unpatentable over *Feldt*, *Musslin*, *Melbye* and applicant's admission of prior art in his specification as applied above in view of U.S. Patent Number 4,993,712 (*Urwin*).

It is inconceivable that a 35 U.S.C. 103(a) rejection may rest solely upon a premise that preshrunk nylon monofilament hook materials are known when, in fact, there exists a host of others, all of which are notoriously recognized as being unworkable in applicant's invention as claimed. How can the tangential contacting and lifting of a tennis ball with an uncommon hooked material be presumed to be obvious when, in fact, the enabling patent teachings of record (not speculative, unenabling and meaningless references such as the cited French patent) clearly teach that it cannot be done? *Feldt* teaches one must change the tennis ball cover with a loop material onto which the hooked material will then be able to attach. *Urwin* teaches you must fully cup and surround the tennis ball (not tangentially contacted) with the hooked material.

In the total absence of teaching even mentioning those attributes which are essential for tangential attachment and lifting of tennis balls amongst consistent patent teachings (one after another) stating it cannot be done, how can obviousness be deduced without any suggestive art teachings that the unexpected discovery of a most uncommon type of hooked material would work? When there exists no knowledge or guidelines, how can it be arbitrarily concluded that the tangential contacting and lifting of a tennis ball with an uncommon hooked material would have

*been obvious?* Where is the required proof to substantiate such an obviousness rejection? The proof of record provides no enabling teachings or guidelines toward applicant's unexpected discovery, but rather teaches to the contrary (i.e. change tennis ball cover or completely cup the ball). What of record teaches and leads the ordinary artisan towards an appreciation that a highly specialized, unique and uncommon preshrunken nylon monofilament of highly specified claimed characteristics may be applied to a tennis ball racquet and will actually upon tangential contact lift a tennis ball without fail? What test, other than applicant's unique test, exists to test the ability of hooked material to lift a tennis ball upon tangential contact? What of record provides the slightest inkling of a selective criteria for finding the unique nylon monofilament hooks to be applied to tennis racquets which permits the racquet with equipped hooks to lift a tennis ball upon tangential contact? In method claims 10-15, unobviousness over the art of record exists in unexpectedly discovering an uncommon set of highly unique and specific preshrunken nylon monofilament hook characteristics which, in face of the prior art's acknowledged failure, unexpectedly provides superior efficacy in lifting a tennis ball upon tangential contact. There is nothing of record which would remotely teach or suggest the uncommon claimed criteria which unexpectedly allows the claimed unique preshrunken nylon monofilament hooks to tangentially contact and lift a tennis ball. Only unsupported speculative conclusions of no greater probative value than the unenabling and speculative teachings of the French *Musslin* patent stand upon which to predicate the factually unsupported 35 U.S.C. 103(a) rejection of record. How can there exist an assumed equivalency when the prior abounds with teachings that tangential contact does not work and only applicant's application reveals a very limited uncommon type of preshrunken nylon monofilament hooks of narrowly defined and unique hook characteristics work? How can equivalency be arbitrarily assumed when the very patent upon which Paper No. 3 relies to show equivalency (i.e. the *Melbye* patent) unequivocally establishes that what is purportedly the equivalent does not work in applicant's invention as claimed? The Rule 132 Affidavit of record clearly refutes any attempt to rest the obviousness rejection upon the hypothetical and unfounded assumption of equivalency amongst a host of

available "hook and loop" materials which are clearly different in structure and function. Equivalency cannot be assumed; it must be proven with art-founded facts for which there are none of record.

The obviousness rejections of First Office Action involve references which applicant studied before the captioned application was filed. In view of the failure of the prior art to fairly teach anything about or suggest the unique claimed attributes of applicant's invention or to enable an artisan to make and use the invention as claimed, coupled with the uniquely distinct and unexpected results achieved by the claimed invention, the invention, as a whole, was accordingly deemed to be unobvious over the art of record.

In the third and fourth paragraph rejections of the Office Action of Paper No. 3, the Examiner relies upon either the *Feldt* '393 patent or the French *Musslin* patent taken in view of the *Melbye* '870 patent coupled with alleged admissions against interest made by the applicant in the specification. Throughout applicant's specification, it is clearly taught that the hooking material is unique in character and function from other fastener hook materials. The Affidavit by the applicant and the test data of Example 1 clearly refute the equivalency allegation of Paper No. 3. Accordingly, there are no admissions against interest by applicant.

The independent claims have now been amended to clearly and patentably distinguish the unique and unexpected embodiments of applicant's method claims 10-15 and combination claims 1-8. There exists no teachings or directions in the cited prior art of record suggesting or directing the ordinary artisan to those unique and unexpected discoveries of the claimed invention. The necessary and required enabling teachings upon which to base a 35 U.S.C.103(a) rejection are not of record and there exists of record no factual teaching which would enable the skilled artisan to make and use applicant's invention as claimed. The guidance towards applicant's invention is completely wanting from the art of record.

The Office Action relies upon a mistaken assumption that any and all commercially available fasteners are equivalent to one another. As evidenced by the record and applicant's Affidavit, this is not true. The Office Action does not adequately recognize that applicant's claims

are directed towards uncommon type preshrunk nylon filament hooks of a very narrowly defined scope (atypical of almost all fasteners) which possess unexpected superior efficacy in tenaciously clinging to the nap or cover of conventional tennis balls so as to permit the tennis ball to be lifted upon tangential contact. The uncommon preshrunk nylon filaments hooks as defined by applicant's claims exclude those hook and loop type fasteners which are most commonly purchased from conventional retail store outlets. The preshrunk hook filaments, as claimed herein, belong to a narrowly defined and limited class of industrial grade fasteners of limited usage for industrial applications, totally unrelated to the unique use as claimed herein. These unique preshrunk nylon filaments (which were unexpectedly discovered by the applicant to possess unique tennis ball retrieving attributes) are uncommon to the normal trade channels and had to be specially obtained from an industrial source. Applicant's discovery was most unexpected, since as taught by the prior art of record, VELCRO™ type materials have hereunto been notoriously recognized as being totally ineffective for use in tangentially contacting, hooking and lifting a conventional tennis ball. The cited *Feldi* patent clearly teaches that only if you change the tennis ball cover to a loop to match the hook of the fastener will it then work.

The *Feldi* patent provides clear evidence that conventional hooked materials for example, such as the VELCRO™ as suggested for use in U.S. Patent No. 3,874,660, are ineffective in retrieving tennis balls. The *Feldi* patent clearly teaches the tennis ball covering is incompatible with conventional hooked materials such as VELCRO™ in that the hooks fail to tenaciously cling to the tennis ball pile and enable the tennis ball to be lifted and retrieved thereby. Accordingly, *Feldi* clearly teaches the non-efficacy of conventional hooked materials and proposes to solve this problem by changing the tennis ball cover completely to the loop material of the hook and loop type fastener so as to overcome the ineffective hooking ability of the conventional VELCRO™ hooked materials. The *Feldi* patent teachings are in complete contradiction to applicant's unexpected discovery and claimed invention. The applicant has discovered (notwithstanding *Feldi*) that a very specific type and highly limited and uncommon type of hooked material possess an unexpected efficacy to tenaciously hook onto the pile of tennis balls so as to permit the lifting

and retrieval of tennis balls upon tangential contact therewith. There are no teachings or suggestions whatsoever in the *Feldt* patent to do what the applicant has accomplished. In fact, the *Feldt* patent dissuades the art from exploring in the area of applicant's findings and teaches precisely the opposite in stating that it won't work unless you change the tennis ball cover. Unexpectedly, applicant discovered a limited and narrowly defined "preshrunk monofilament hooks" of highly specific characteristics are effective without completely changing the tennis ball pile. Certainly such patent teachings do not fairly teach and suggest the embodiments of applicant's invention as claimed. *Feldt* discourages the skilled artisan from seeking the solution unexpectedly discovered by applicant.

If a patent combination under 35 U.S.C. 103(a) must destroy the essence of the disclosed invention or render it inoperative for its intended purpose or function, then the patent combination is improper since patents cannot be read so as to destroy or render inoperative their respective teaching. In applying *Feldt*, Paper No. 3 must *ipso facto* conclude that changing the tennis ball cover to a fastener loop is immaterial, when, in fact, it constitutes the essence of the *Feldt* patent teachings.

It will also be observed that applicant's combination claims include an attachment comprised of a "hook fastener material adhesively attached on a convex outer portion of the shoulder" with the hook material being very specifically characterized as "a series of preshrunk nylon monofilament hooks having an average monofilament diameter greater than 8.0 mil and an average hook height of at least 1.7 mm" (e.g., see independent claims 1 and 10). Furthermore, in claim 10, the hook material is defined as "having a plurality of nylon monofilament hooks of an average monofilament diameter of at least 8.0 mil and an average hook height of at least 1.85 mm and an average hook width of at least 1 mm and an average depth of at least .6 mm with the hooks being in a spiral configuration arranged in repetitive rows of at least 250 hooks per square inch." It is also indicated in claim 10 that the hooked material is positioned on the outer peripheral edge of a shoulder of the tennis racket and that tangentially contacting upon the grounded tennis ball allows it to engage and hook the tennis



ball nap. The words "tangentially contacting" clearly distinguishes method claims 10-15 from the necessary cupped contact of the *Urwin* '712 patent. Why does *Urwin* '712 use a fastener hook material which surrounds the ball? By relying upon *Urwin*, Paper No. 3 chooses to disregard the essence of the *Urwin* patent teachings (i.e. completely cup the ball within the hook fastener). Thus, the reliance upon *Urwin* in the manner in which is applied in Paper No. 3 destroys the basic and novel teaching of *Urwin* and renders it inoperable for its intended purpose and function. Thus, what both *Feldt* and *Urwin* teach as essential is completely negated and disregarded when these patent teachings are applied against applicant's claims. How can there be tangential contact if the patent, as *Urwin* teaches, is completely cupping the ball?

The French patent fails to offer anything over and beyond what is already taught and suggested by the *Feldt* and *Urwin* patents. Accordingly, claims 8, 11 and 13-15 are clearly allowable since the *Urwin* and *Feldt* patents and each such result cannot be achieved. Moreover, the French patent does not contain any teachings whatsoever which would lead and suggest the ordinary artisan to the very limited type of hook materials which applicant has found to work with the conventional covering napped materials of tennis balls. In the first instance, the *Feldt* patent teaches that only by changing the nap of the tennis ball to the loop of the fasteners can one effectively use conventional VELCRO™. Thus, only by completely changing the tennis ball nap to the looped material will the conventional hook materials then engage and effectively lift the tennis ball.

The Office Action reflects a reliance upon disjointed and isolated teachings taken out of the context in which they are found to provide a combination of discordant patent teachings which purportedly teach applicant's claimed invention.

The isolated patent teachings have been combined in a manner totally discordant with what each patent teaches. The obviousness rejections must necessarily rely upon applicant's own teachings to provide the motivation and reasons for randomly selecting those isolated and discordant teachings relied upon in the 35 U.S.C. 103(a) rejections.

The Examiner has also relied upon the *Melbye* patent as meeting the claimed preshrunk monofilament hook characteristics, when, in fact, it teaches a completely different type of hook and loop fastener material from what is claimed herein. By relying upon the inapposite *Melbye* patent mushroom-type fasteners, the Patent Examiner *de facto* contradicts his stated position of equivalency and applicant's admission of equivalency. If equivalency (i.e., actual and obvious equivalents) exists, why then has the examiner chosen a patent which teaches a mushroom-type fastener which does not work?

The *Melbye* '870 patent discloses a fastener described as "mushroom-type hook strip" as opposed to applicant's claimed "series of pre-shrunk nylon monofilament hooks" of claims 1 and 10 (also dependent claims 2-9 and 11-15) or the added limitation of independent claim 10 that "the monofilament hooks are of spiral configuration" arranged in repetitive rows of at least 250 hooks per square inch. The *Melbye* '870 fastener is not a series of preshrunk nylon monofilament hooks of applicant's claims and is much less of a spiral configuration of monofilament hooks arranged in repetitive rows. *Melbye* is a molded pedestal mushroom-type fastener product not a spiral preshrunk monofilament with repetitive hooks in the spiral wound row. To combine *Melbye* with *Feldt*, both the tennis ball covering nap and the hooked material would have to be changed to achieve the necessary compatibility. There exists no factual basis to arbitrarily conclude that the inapposite fastener of *Melbye* works or constitutes an equivalent to applicant's claimed limitation of fastener hooks, much less than it can be used in either the French or *Feldt* patents.

It is rather illogical to assume that when one teaches that you have to change the nap of the tennis ball or the cover of the tennis ball for VELCRO™ to work in either the French or *Feldt* patents, that you may then randomly and arbitrarily substitute the non-equivalent material of the *Melbye* patent. Furthermore, the material of the *Melbye* patent is not the material which the applicant is claiming as the hooked material. The Rule 132 Affidavit by the applicant and the test results reported therein clearly refute any alleged equivalency between the cited *Melbye* patent and applicant's claims. As stated in applicant's Rule 132 Affidavit, a comparison between

applicant's Figure 5 and Figure 1 of the *Melbye* patent clearly reveals that the "hooks" are neither actual nor obvious equivalents. They certainly function differently and produce totally different results. The *Melbye* fasteners do not work. Thus, there is no basis whatsoever for the Examiner to reach the conclusion that applicant's invention would be obvious in view of either the teachings of the French patent or the *Feldi* patent in combination with the *Melbye, et al*, patent. Even if *Melbye* were combined with either the *Feldi* patent or the French *Musslin* patent, the combined teachings still would not teach the invention as defined by applicant's claims.

The French Patent No. 2,594,037 to *Musslin* is completely silent as to what cloth with catching elements may be used. The French *Musslin* patent refers to an unbridled number of cloth materials with catching elements, none of which were deemed by the art to be effective, as evidenced by the *Feldi* teachings in column 1, lines 15-25 citing of two major drawbacks, namely "VELCRO™" hooks render it very difficult to effectively pick up a standard tennis ball (fails four out of five times) and after use for "just a few retrievals using the standard tennis ball, the ball cover becomes fuzzy and no longer useful in normal play." As *Feldi* teaches to the art, what is proposed without any enabling teaching by French *Musslin* will not work, (i.e. it will not effectively engage and lift and it will destroy the felt nap.) Thus, according to *Feldi*, only if you change the tennis ball to the loop material of the hooked loop type fastener will it then work. Interestingly, if the applicant were to replace the nap of the tennis ball with the loop material of the uncommon ScotchMate™ industrial fastener of Example 1, the tennis ball would not conform with the professional tennis ball requirements. Clearly, the French *Musslin* patent lacks the necessary teachings upon which to base 35 U.S.C. 103(a) rejection. The uncommon pre-shrunk monofilament, as claimed by the applicant herein, is completely absent from the French *Musslin* patent teachings. Only via unwarranted speculation can it be concluded that it teaches applicant's unique and claimed embodiments.

The final rejection accordingly lacks the necessary factual basis upon which to base a 35 U.S.C. 103(a) rejection. The Examiner is not relying upon what is fairly taught and suggested by the prior art, but rather is hindsightedly viewing applicant's invention and reconstructing the

patent teachings in a manner totally discordant with their respective teachings to reach a conclusion that such hypothetical patent teachings would fairly teach and suggest the obviousness of applicant's claimed invention. No proper 35 U.S.C. 103(a) rejection can rest upon factual assumptions totally unfounded upon the art relied upon in the 35 U.S.C. 103(a) rejection.

The same faulty rationale exists in the conclusion that claims 8, 11, 13 and 15 would be obvious in view of the combined teachings of *Feldt*, *Musslin*, *Melbye* and applicant's admission to the prior art as applied in view of the *Urwin* '712 patent. The *Urwin* patent clearly supports the patentability of applicant's claims 1-15. The *Urwin* patent teaches that if you use a VELCRO™ material to retrieve tennis ball, the VELCRO™ must then be provided in a cup form, which teachings are consistent with the teachings of applicant's specification that heretofore there existed no means whatsoever to tangentially contact and lift a tennis ball with hooked VELCRO™ type materials. Applicant's summary of the '712 *Urwin* in lines 8-12 on Page 3 of the specification summarizes the recognized failure of the art to accomplish the unobvious subject matter as defined in subparagraph c, d and e of claim 10, namely of tangentially contacting a grounded tennis ball — so as to engage and hook a tennis ball nap, and to lift and retrieve the tangentially contacted and hooked tennis ball nap. *Urwin* '712 admits that his device does not effectuate hooking upon tangential contact but rather must completely surround the ball with a cupped shaped device so as to completely contact the upper half surface of the tennis ball in order to achieve enough hooking to lift the ball. The encompassing cup is required because of the ineffectiveness of the VELCRO™ materials. *Urwin* thus directs the artisan away from the unique claimed embodiments of applicant's claimed invention of "attaching the hooked fasteners to the outer perimeter portion of the shoulder" or the step of "tangentially contacting". In applying *Urwin*, there must be complete disregard for the essence, the basic and novel teachings or essential teaching of *Urwin* to provide a cup (not tangential contact or contacting of the tennis ball) when it is applied against applicant's claims. This is impermissible under 35 U.S.C.103(a). The prior art accordingly fails to remotely comprehend and suggest these unique claimed

embodiments of applicant's invention. Applicant alone has taught these very crucial embodiments essential to the efficacy of the invention and the ability to overcome the failures of the prior art.

The *Melbye, et al*, patent fails to support the 35 U.S.C. 103(a) rejections of record and in fact provides unequivocal evidence of the patentability of applicant's claims 1-7, 9, 10 and 12. *Melbye, et al*, is relied upon for its alleged teachings that VELCRO™ and ScotchMate™ are functional equivalents while also alleging applicant's fastener is old and well known and that selection of the fastener of *Feldt* or *Musslin* would be within the level of ordinary skill in the art. The facts are incongruous with the position of record in Paper No. 3.

Allegedly the *Melbye* patent meets these prescribed conditions of claims and therefore, renders the selection obvious. Nothing, however, could be further from the truth in that *Melbye* is not comprised of a "hooked fastener material" ... "having a series of pre-shrunk nylon monofilament hooks" - of ... an average monofilament diameter greater than 8.0 mil and average hook height of at least 1.70 mm. *Melbye* is not a preshrunk monofilament material" ... have "a series of hooks". There is no monofilament, much less a hook, or more remotely, a preshrunk nylon monofilament material disclosed by *Melbye*. Thus *Melbye* is inapposite to applicant's claims and discovery and, therefore, has no relevancy to the claims at issue.

*Melbye* is a mushroom-type hook strip which is produced by injecting and molding a resin into a mushroom-shaped cavity. The oppositely positioned hook and loop is also a mushroom-shaped material derived by injecting a resin into a mushroom-shaped mold.

The major problem of the *Melbye* patent is that it only works in cooperative association with a series of mating mushroom hooks as illustrated in the *Melbye* Figure 2. A tennis ball, unless especially modified to include a cover comprised of the mating mushroom hooks as prepared by the cited *Feldt* (U.S. Patent No. 4,834,393), would be useless in hooking and picking up a conventional tennis ball.

It should be self-evident that the very art relied upon in the 35 U.S.C. 103(a) rejections to establish equivalency (i.e., functional equivalents) fails because the very reference relied upon for this purpose (i.e., *Melbye*) fails to disclose or remotely suggest applicant's claimed subject matter

and the specific monofilament hook which by itself cannot tangentially hook onto and lift a conventional tennis ball.

The Office Action relies upon the cited *Feldt* patent as a primary reference in rejecting applicant's combination Claims 1-9 which recite a tennis racquet equipped with an attachment of pre-shrunk nylon monofilament hooks of highly specific and narrowly defined physical character having the unique capability of hooking onto and lifting a conventional tennis ball upon tangential contact therewith and lifting.

In complete contrast to the erroneously based position of Paper No. 3, *Feldt de facto* admits that the VELCRO™ hook material as disclosed by U.S. Pat. No. 3,874,660 to Rossi "in that it is very difficult to pick up a standard tennis ball with this system, the standard material covering is not compatible with the hook fastener system" (e.g., see Col. 1, lines 18 - 22). The solution of *Feldt* is to "incorporate an entirely new covering on a tennis ball. This new covering would be the loop material of a hook and loop system."

The Office Action proposes to read the *Feldt*, *Melbye* and *Urwin* patents in a manner which would negate or render inoperative the basic and novel teachings of each of these patents. *Feldt* and *Melbye* are consistent in that if their patents were to be combined under 35 U.S.C.103(a), the mushroom molded pedestals would be used in both the racquet and as the new covering for the tennis ball as essential to the *Feldt* teachings. The Office Action chooses to read into the French *Muslin* patent matters which are neither taught nor suggested by the non-enabling and meaningless disclosure of the cited French *Muslin* patent. *Feldt* and *Urwin* are consistent only if the cup of *Urwin* were combined with *Feldt* and the tennis ball cover is changed to a looped material. Applicant's claims do not in any form require the tennis ball cover to be modified to a specialized loop form so as to be compatible with the hook material of *Feldt*. The "new revolutionary tennis ball covered with loop fastener" constitutes the essence of the *Feldt, et al*, patent. To rely upon *Feldt* as a primary reference without changing the tennis ball cover to a loop fastener cover destroys the essence, the basic and novel features of *Feldt*. References may not be used in a 35 U.S.C.103(a) rejection in such a manner which destroys the

essence and the base novel teachings to the artisan. An ordinary artisan in combining *Feldt* with *Melbye* would not do precisely opposite from what the patent teaches to the artisan. To completely contradict patent teachings when combining the patent with another patent clearly reflects a complete disregard of suggestive teachings as required in any proper reference combination under 35 U.S.C. 103(a). References under 35 U.S.C. 103(a) do not suggest an undertaking completely contradictory to the patent teachings. To rely upon incongruous unfounded, untaught, undisclosed teachings or rationale in combining references constitutes nothing more than hindsight reconstruction of the prior art study in view of applicant's own teachings, and not the prior art.

There is enclosed for the Examiner's use a "Supplemental Claim Addendum" in which the added material to the claims has been underlined and the deleted portions have been bracketed.

Applicant's attorney believes that this response should place applicant's application in condition for allowance. If for any reason the application is not considered to be in condition for allowance, applicant's attorney requests a telephone interview with Examiner Chiu so as to discuss the merits of the application.

The applicant respectfully submits that the pending claims comply with the 35 U.S.C. 112 requirements, define novel and unobviousness subject matter over the art of record, and place the claims in condition for allowance. Reconsideration and early allowance of the application and the amended claims are respectfully requested.

Dated this 19th day of October, 2001.

Respectfully submitted,

*M. Paul Hendrickson*

M. Paul Hendrickson  
Attorney for Applicant  
Registration No. 24523

Phone: 608-526-4422  
Fax: 608-526-2711

Post Office Box 508  
Holmen, Wisconsin 54636-0508